

CLAIMS

What is claimed is:

- 5    1. A method for generating node configuration data, comprising:  
     forming a service level agreement template, said forming  
     including  
            determining a plurality of traffic classes,  
            determining at least one required input for a first  
10     graphical user interface, and  
            determining at least one required input for a second  
     graphical user interface;  
            obtaining service level agreement constraints for at least  
     one service level agreement, said obtaining including  
15     generating said first graphical user interface,  
            obtaining, through said first graphical user interface,  
     indication of a selected one of said plurality of traffic  
     classes,  
            obtaining, through said first graphical user interface,  
20     at least one value associated with said at least one  
     required input for said first graphical user interface,  
            generating said second graphical user interface, and  
            obtaining, through said second graphical user  
     interface, at least one value associated with said at least  
25     one required input for said second graphical user interface;  
     and  
            generating, responsive to said selected one of said  
     plurality of traffic classes, said at least one value associated  
     with said at least one required input for said first graphical  
30     user interface, and said at least one value associated with said  
     at least one required input for said second graphical user  
     interface, node configuration data, said node configuration data  
     describing how at least one resource in at least one networking

device is to be configured to support at least one network service described by said selected one of said plurality of traffic classes, said at least one value associated with said at least one required input for said first graphical user interface.

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2. The method of claim 1, further comprising:

determining at least one default equation associated with said first graphical user interface;

10 applying said default equation to said at least one value associated with said at least one required input for said first graphical user interface to generate a first set of outputs; and

wherein said generating said node configuration data is further responsive to said first set of outputs.

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least one resource associated with at least one networking device, wherein said required information associated with said at least one resource describes, at least in part, a virtual private network.

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6. The method of claim 5, wherein said required information describing said at least one resource comprises a virtual network identifier.

10 7. The method of claim 5, wherein said required information describing said at least one resource comprises an indication of whether connectivity is required between said at least one networking device and a second networking device.

15 8. The method of claim 1, wherein said forming said service level agreement template further includes:

determining at least one optional input for said second graphical user interface,

determining at least one format of at least one screen display in said second graphical user interface, wherein said at least one screen format includes a first field associated with said required input for said second graphical user interface and a second field associated with said at least one optional input for said second graphical user interface; and

25 wherein said generating said second graphical user interface includes displaying said at least one screen display in said second graphical user interface responsive to said at least one format.

30 9. The method of claim 1, wherein said forming a service level agreement template comprises receiving at least one input through a third graphical user interface.

10. A system for generating node configuration data, comprising:  
at least one memory for storing program code;  
at least one processor, communicably coupled to said memory,  
said at least one processor operable to execute program code  
5 stored in said memory;
- program code, stored in said memory, for forming a service  
level agreement template, said program code for forming said  
service level agreement template including
- 10 program code for determining a plurality of traffic  
classes,
- program code for determining at least one required  
input for a first graphical user interface, and
- 15 program code for determining at least one required  
input for a second graphical user interface;
- program code, stored in said memory, for obtaining service  
level agreement constraints for at least one service level  
agreement, said program code for obtaining including said service  
level agreement constraints including
- 20 program code for generating said first graphical user  
interface,
- program code for obtaining, through said first  
graphical user interface, indication of a selected one of  
said plurality of traffic classes,
- 25 program code for obtaining, through said first  
graphical user interface, at least one value associated with  
said at least one required input for said first graphical  
user interface,
- program code for generating said second graphical user  
interface, and
- 30 program code for obtaining, through said second  
graphical user interface, at least one value associated with  
said at least one required input for said second graphical  
user interface; and

program code, stored in said memory, for generating, responsive to said selected one of said plurality of traffic classes, said at least one value associated with said at least one required input for said first graphical user interface, and said  
5 at least one value associated with said at least one required input for said second graphical user interface, node configuration data, said node configuration data describing how at least one resource in at least one networking device is to be configured to support at least one network service described by said selected  
10 one of said plurality of traffic classes, said at least one value associated with said at least one required input for said first graphical user interface.

11. The system of claim 10, further comprising:

15 program code for determining at least one default equation associated with said first graphical user interface;

20 program code for applying said default equation to said at least one value associated with said at least one required input for said first graphical user interface to generate a first set of outputs; and

25 wherein said program code for generating said node configuration data is further responsive to said first set of outputs.

12. The system of claim 10, said program code for forming said service level agreement template further comprising:

30 program code for determining at least one optional input for said first graphical user interface;

35 program code for determining at least one format of at least one screen display in said first graphical user interface, wherein said at least one screen format includes a first field associated with said required input for said first graphical user interface

and a second field associated with said optional input for said second graphical user interface; and

wherein said program code for generating said first graphical user interface includes program code for displaying said at least one screen display.

13. The system of claim 11, wherein said at least one default equation comprises program code.

10 14. The system of claim 10, wherein said program code for determining said at least one required input for said second graphical user interface further comprises program code for determining required information describing at least one resource associated with at least one networking device, wherein said required information associated with said at least one resource describes, at least in part, a virtual private network.

15 15. The system of claim 14, wherein said required information describing said at least one resource comprises a virtual network identifier.

20 16. The system of claim 14, wherein said required information describing said at least one resource comprises an indication of whether connectivity is required between said at least one networking device and a second networking device.

25 17. The system of claim 10, said program code for forming said service level agreement template further comprising:

30 program code for determining at least one optional input for said second graphical user interface;

program code for determining at least one format of at least one screen display in said second graphical user interface, wherein said at least one screen format includes a first field

associated with said required input for said second graphical user interface and a second field associated with said at least one optional input for said second graphical user interface; and

5       wherein said program code for generating said second graphical user interface includes program code for displaying said at least one screen display in said second graphical user interface responsive to said at least one format.

10      18. The system of claim 10, wherein said program code for forming a service level agreement template comprises program code for receiving at least one input through a third graphical user interface.

15      19. A system for generating node configuration data, comprising:  
          means for forming a service level agreement template, said program code for forming said service level agreement template including

20            means for determining a plurality of traffic classes,  
          means for determining at least one required input for a first graphical user interface, and

25            means for determining at least one required input for a second graphical user interface;

          means for obtaining service level agreement constraints for at least one service level agreement, said means for obtaining including said service level agreement constraints including

          means for generating said first graphical user interface,

30            means for obtaining, through said first graphical user interface, indication of a selected one of said plurality of traffic classes,

          means for obtaining, through said first graphical user interface, at least one value associated with said at least one required input for said first graphical user interface,

means for generating said second graphical user interface, and

means for obtaining, through said second graphical user interface, at least one value associated with said at least one required input for said second graphical user interface;

and

means for generating, responsive to said selected one of said plurality of traffic classes, said at least one value associated with said at least one required input for said first graphical user interface, and said at least one value associated with said at least one required input for said second graphical user interface, node configuration data, said node configuration data describing how at least one resource in at least one networking device is to be configured to support at least one network service described by said selected one of said plurality of traffic classes, said at least one value associated with said at least one required input for said first graphical user interface.